BERYLLIUM STATISTICS

By David A. Buckingham and Larry D. Cunningham

[All values are in metric tons (t) beryllium content unless otherwise noted]

Last modification: August 18, 2004

	Reported				Estimated	Estimated	Estimated	Reported
	mine	Reported	Reported	Reported	apparent	unit value	unit value	world mine
Year	production	imports	exports	stocks	consumption	(\$/t)	(98\$/t)	production
1935	3					249,000	2,960,000	16
1936	1	6			7	249,000	2,920,000	17
1937	3	7			7	220,000	2,490,000	15
1938	1	5			11	220,000	2,540,000	
1939	3	17			18	220,000	2,580,000	36
1940	4	29			22	99,200	1,200,000	87
1941	6	97			44	99,200	1,100,000	164
1942	10	74		51	85	104,000	1,000,000	120
1943	13	176		40	111	99,200	935,000	218
1944	14	113		5	79	99,200	919,000	
1945	1	44		3	63	99,200	898,000	
1946	4	43		32	37	99,200	829,000	
1947	5	28		14	63	210,000	1,500,000	57
1948	4	62		38	72	210,000	1,400,000	
1949	17	138		84	37	210,000	1,400,000	
1950	20	168		95	109	210,000	1,400,000	
1951	18	176		51	123	210,000	1,300,000	
1952	19	157		90	126	210,000	1,300,000	
1953	27	290		181	97	158,000	965,000	
1954	24	211		149	71	158,000	957,000	
1955	18	219		105	140	158,000	961,000	
1956	16	449		168	158	158,000	947,000	
1957	19	265		264	156	158,000	917,000	410
1958 1959	18	167		164	218	158,000	891,000	
1939	15 18	292 325		140 99	297 352	158,000 150,000	885,000 826,000	
1961	41	309		177	332	120,000	654,000	
1962	35	310		198	282	120,000	648,000	
1963	27	227		315	288	120,000	639,000	
1964	21	201	77	261	161	120,000	631,000	
1965		238	54		212	120,000	621,000	
1966		83	28		219	120,000	604,000	
1967		351	34					
1968	6	145	43		335	120,000		
1969		235	14		308	130,000	577,000	322
1970		182	18		345	130,000	546,000	
1971		146	19		376		523,000	
1972		122	44	251	282	130,000	507,000	
1973		59	50		316	, and the second	404,000	
1974		55	65		190	132,000	436,000	
1975		64	17	129	160	131,000	397,000	119
1976		39	52	144	46	131,000	375,000	93
1977		31	73		61	212,000	570,000	
1978		38	37		246	227,000	568,000	105
1979		39	33		275	227,000	510,000	96
1980	270	67	26		292	265,000	524,000	373
1981	266	79	35	81	278	326,000	585,000	384
1982	198	104	61	186	136	366,000	618,000	327
1983	242	88	17	255	243	392,000	642,000	366
1984	219	80	18	205	303	392,000	615,000	359

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Year	production	imports	exports	stocks	consumption	(\$/t)	(98\$/t)	production
1985	209	111	54	181	263	432,000	654,000	326
1986	237	73	36	177	278	450,000	669,000	356
1987	220	133	77	164	289	505,000	725,000	345
1988	212	47	37	158	228	538,000	741,000	332
1989	184	38	34	153	187	575,000	756,000	301
1990	182	25	45	119	175	593,000	740,000	284
1991	174	55	33	112	203	617,000	738,000	263
1992	193	6	41	111	159	617,000	717,000	278
1993	198	8	20	114	182	650,000	733,000	243
1994	173	53	29	113	198	650,000	715,000	218
1995	202	32	61	162	198	849,000	908,000	247
1996	211	20	57	139	197	849,000	882,000	255
1997	231	20	40	110	316	849,000	862,000	276
1998	243	50	60	80	320	849,000	849,000	289
1999	200	20	40	20	385	849,000	831,000	248
2000	180	20	35	115	300	1,080,000	1,020,000	226
2001	100	115	60	100	230	827,000	761,000	145
2002	80	150	120	90	180	827,000	749,000	126

Beryllium Worksheet Notes

Data Sources

Sources of data for the beryllium worksheet are the mineral statistics publications of the U.S. Bureau of Mines and the U.S. Geological Survey—Minerals Yearbook (MYB); Mineral Commodity Summaries (MCS) and its predecessor, Commodity Data Summaries (CDS); Minerals Facts and Problems (MFP); and Metal Prices in the United States through 1998 (MP98). The years of publication and corresponding years of data coverage are listed in the References section below. Blank cells in the worksheet indicate that data are not available.

Reported Mine Production

Mine production data represent the beryllium content in beryllium-bearing ores shipped from mines within the United States. Data are based on a beryllium metal equivalent of 4% Be in beryl and bertrandite ores, calculated as equivalent to beryl ore containing 11% BeO. Data are not available prior to the year 1935, and for the years 1964–67 and 1969–79. Data are reported in the MYB.

Reported Imports

Data represent the beryllium content of beryllium ores and/or metal imported into the United States. Import data are not available prior to the year 1936. Data for the years 1936–2002 are reported in the MYB, however unpublished revisions for the year 1952, and 1964–2002 were used instead of published data.

Reported Exports

Data represent the beryllium content of various beryllium materials exported from the United States. Export data are not available prior to the year 1942. Data for the years 1942–63 are ambiguous with the beryllium content not definable. For the years 1964–83, data are reported in the MFP. Data for the years 1984–2002 are reported in the MCS.

Reported Stocks

Data are industry stocks, and represent the beryllium content of various beryllium materials held in producer and consumer inventories as of end of year, December 31. Stock data are not available prior to the year 1942 and the years 1977–80. Data for the years 1942–47 are reported in the MYB. Data for the years 1948–76 are reported in the CDS, and data for the years 1981–2002 are reported in the MCS.

Estimated Apparent Consumption

Apparent consumption data for the year 1935 is not available. Data for the years 1936–71 are for beryl ore only, reported in terms of the beryllium content. Data for the years 1972–2002 represent the calculated total beryllium content of various beryllium materials consumed/used in the United States. Data for the years 1936–47 are reported in the MYB. Data for the years 1948–76 are reported in the CDS, and data for the years 1981–2002 are reported in the MCS.

Estimated Unit Value (\$/t)

Unit value is defined as the value of 1 metric ton (t) of beryllium apparent consumption. In years prior to 1947, unit value is estimated by using the average beryllium metal market price as reported in the MYB. Unit value data for the years 1947–2002 are estimated by using the average beryllium metal market price as reported in the MP98, MYB, and MCS.

Estimated Unit Value (98\$/t)

The Consumer Price Index conversion factor, with 1998 as the base year, is used to adjust unit value in current U.S. dollars to the unit value in constant 1998 U.S. dollars.

Reported World Mine Production

Data represent the beryllium content of beryllium-bearing ores produced from mines throughout the world. World mine production data are based on a beryllium metal equivalent of 4% Be in beryl and bertrandite ores, reported as equivalent to beryl ore containing 11% BeO. Data are not available prior to the year 1935. U.S. production data for the years 1964–67 and 1969–79 are not available and not included in the total. Data are reported in the MYB.

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